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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,306	06/27/2003	Bryan Comeau	XP-1119	8041

7590 06/02/2004
Agfa Corporation
Law & Patent Department
200 Ballardvale Street
Wilmington, MA 01887-1069

EXAMINER

MARTINEZ, JOSEPH P

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/609,306

Applicant(s)

COMEAU ET AL.

Examiner

Joseph P. Martinez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-2 and 6-7 are rejected under 35 U.S.C. 102(a) as being fully anticipated by Kruschwitz et al. (6479811).

Re claims 1 and 6, Kruschwitz et al. teaches for example in fig. 6, an illumination modulator correction system for adjusting the operational parameters of an illumination modulator in an imaging system, said correction system comprising: modulator pattern generation unit (64) for providing a test pattern on the illumination modulator (col. 7, ln. 30-32 and col. 8, ln. 64-66); modulator adjustment unit (78) for permitting an actuation voltage on said illumination modulator to be changed through a range of actuation voltage values (col. 7, ln. 60-62); a detector (76) for receiving a modulated illumination field in at least a first region from said illumination modulator in a first direction (col. 7, ln. 46-49); sampling unit (82, wherein the office interprets the sampling unit and evaluation unit to be an integral unit as taught by Kruschwitz et al.) for determining at least one sample value for at least one area or one region of said modulated illumination field (col. 8, ln. 2-6); and evaluation unit (82, wherein the office interprets the sampling unit and evaluation unit to be an integral unit as taught by Kruschwitz et al.) for determining a minimum or optimal sample value (col. 7, ln. 3-13) within said range of actuation voltage values of said illumination modulator (col. 8, ln. 2-6).

Re claims 2 and 7, Kruschwitz et al. further teaches for example in fig. 6, said system further includes adjustment unit (78) for adjusting the actuation voltage of said illumination modulator responsive to said evaluation unit (col. 7, ln. 60-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5 and 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kruschwitz et al. (6479811).

Re claims 3, 8 and 12, Kruschwitz et al. teaches for example in fig. 6, an illumination modulator correction system for adjusting the operational parameters of an illumination modulator in an imaging system, said correction system comprising: modulator pattern unit (64) for providing a test pattern on the illumination modulator over a first area in a first direction (col. 7, ln. 30-32 and col. 8, ln. 64-66); modulator adjustment unit (78) for permitting an actuation voltage on said illumination modulator to be changed through a range of actuation voltage values (col. 7, ln. 60-62); a detector (76) for receiving a modulated illumination field from said illumination modulator in said first direction (col. 7, ln. 46-49); sampling unit (82, wherein the office interprets the sampling unit and evaluation unit to be an integral unit as taught by Kruschwitz et al.) for determining an average sample value for each of said regions of said modulated illumination field (col. 8, ln. 2-6); and evaluation unit (82, wherein the office interprets the sampling unit and evaluation unit to be an integral unit as taught by Kruschwitz et

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al.) for determining an optimal sample value (col. 7, ln. 3-13) within said range of activation voltage values of said illumination modulator (col. 8, ln. 2-6).

But, Kruschwitz et al. fails to explicitly teach a first region, a second region and a third region.

However, Kruschwitz et al. teaches the use of a segmented detector to "monitor the intensity of the light diffracted from each pixel" (col. 7, ln. 54-56) and further that the image from each pixel "covers one or more segments of the segmented detector" (col. 7, ln. 51-54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide three sample values for three areas as claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Kruschwitz et al. to provide three sample values for three areas in order to provide a spatially uniform diffracted intensity profile or constant output power (col. 8, ln. 5-9).

Re claim 13, Kruschwitz et al. further teaches for example in fig. 6, said system further includes adjustment unit (78) for adjusting the actuation voltage of said illumination modulator responsive to said evaluation unit (col. 7, ln. 60-65).

Re claims 4-5, 9-11 and 14-17, Kruschwitz et al. further teaches for example, minimum sample value is determined at a rollover point for one of said sample values in the central region

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of said first area (col. 7, ln. 54-56, wherein the office interprets the teachings of monitoring intensity of each pixel to include a central region of the first area) or responsive to a second rollover point for said sample values (η_0 and η_1 , col. 7, ln. 3-13, wherein the office interprets the teachings of Kruschwitz et al. to include at least two rollover points calculated going from minimum to maximum and from maximum to minimum) or said optimal value is determined responsive to a rollover point having a minimal energy value for said sample values (col. 7, ln. 3-13).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph P. Martinez whose telephone number is 571-272-2335. The examiner can normally be reached on M-F 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

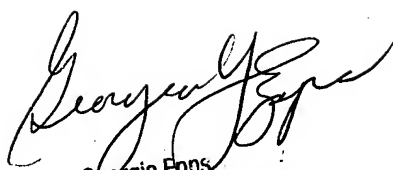
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JPM

5-27-04


Georgia Epps
Supervisory Patent Examiner
Technology Center 2800